DOCUMENT RESUME

ED 085 262 SE 017 101

AUTHOR	Disinger, John F.; Lee, Beverly M.
TITLE	State Directories in Environmental Education. Volume I. U. S. Office of Education Region I.
INSTITUTION	ERIC Information Analysis Center for Science, Mathematics, and Environmental Education, Columbus, Ohio.
PUB DATE	Nov 73
NOTE	57p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	College Science; *Directories; *Educational Programs; *Environmental Education; Human Resources; Instructional Materials; Programs; *Resource Materials; Secondary School Science; *State Programs

ABSTRACT

This compilation is one of a series produced through the combined efforts of the United States Office of Education/Environmental Education, coordinators for environmental education in the various states, and the ERIC Center for Science, Mathematics, and Environmental Education, in an attempt to collect and detail environmental education efforts throughout the nation. The series is assembled in geographical groupings, using combinations of the U.S. Office of Education regions. This first volume in the series includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. Environmental education information from these states is provided under the following headings: State Environmental Education Contact; State Plan Activities; School Programs and Activities (or Environmental Education Programs Funded); University and College Programs and Activities; Groups and Agencies with Interest in Environmental Education; Resource Materials Available; and Possible Resource People. Related documents are SE 017 102 - SE 017 105. (JR)

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STATE DIRECTORIES IN ENVIRONMENTAL EDUCATION

Based on Information Supplied By
The United States Office of Education/Environmental Education
and
State Coordinators for Environmental Education

Coordinated by: John F. Disinger and Beverly M. Lee

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ERIC Information Analysis Center for
Science, Mathematics, and Environmental Education
The Ohio State University
400 Lincoln Tower
Columbus, Ohio 43210

November, 1973

SE 017 101

PREFACE

This compilation is one of a series produced through the combined efforts of the United States Office of Education/Environmental Education (USOE/EE), coordinators for environmental education in the various states, and the ERIC Center for Science, Mathematics, and Environmental Education (ERIC/SMEAC), in an attempt to collect and detail environmental education efforts throughout the nation.

The compilation was begun in 1972 as part of a contract between USOE/EE and ERIC/SMEAC. Initial input was obtained from the files of the USOE/EE and assembled by Ms. Joan M. Nicholson, Ms. Catherine Barnett, and Mr. Andrew B. Rosenberg of that office, working under the direction of Mr. Paul Cromwell, USOE/EE, and Dr. John F. Disinger, ERIC/SMEAC.

Coordinators of environmental education at the state level were asked to review the information for their respective states in detail, and have made numerous additions, deletions, and other corrections. In cases where such a review was not obtained, information based on original 1972 data from USOE/EE has been utilized.

Because the field of environmental education is dynamic, many revisions have been necessary, and will continue to be so. Therefore, inaccuracies in this and other volumes in the series will generally reflect inability to keep up with change in the field, though doubtless other errors of both commission and omission will be noted. ERIC/SMEAC will appreciate any information regarding such errors, both to keep its own files updated and for future editions of these directories.

The series is assembled in geographical groupings, using combinations of the U. S. Office of Education regions, and is available only through Educational Document Reproduction Service (EDRS). Contents of each document are listed on the next page. Also noted for each entry is recentness of update information: entries not marked with asterisks have been updated since June 1, 1973; those marked by single asterisks were reviewed by state coordinators in late 1972 or early 1973; those marked by double asterisks have not been reviewed by state coordinators.

In addition to those named above, substantive assistance has been received from: George Lowe, USOE/EE; Robert W. Howe and Robert E. Roth, ERIC/SMEAC; Mrs. Robert L. Steiner and Mrs. Stanley L. Helgeson, typists; and coordinators for environmental education in the various states, as named within the individual entries.

John F. Disinger and Beverly M. Lee
Coordinators

November, 1973

This publication was prepared pursuant to a contract with the National Institute of Education, United States Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent National Institute of Education position or policy.

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South Dakota**
Utah
Washington
Wyoming

* Entry updated by state coordinator between September 1, 1972 and June 1, 1973.

** No update information received from state coordinator; entry based on information supplied in Spring, 1972 by USOE/EE.

All other entries have been reviewed and updated by state coordinators for environmental education since June 1, 1973.

CONNECTICUT

STATE E.E. CONTACT:

Dr. Sigmund Abeles
Consultant in Science Education
State Department of Education
Box 2219
Hartford, Connecticut 06115
(203) 566-4825

STATE PLAN ACTIVITIES:

Two years ago, approximately twenty state agencies, private and professional groups and business organizations provided representation to form the Connecticut State Council on Environmental Education.

The main objective of the organization is to provide planning and perspective for the environmental education programs in the state. The hope is to make the programs more effective, avoid unnecessary duplication of effort, disseminate information about existing activities and identify resources which can be useful to those working in the environmental education field.

The Council has met monthly (with the exception of summers) over these two years. It has elected a chairman, an executive secretary, and an executive board. It has also developed a State Plan entitled: A Coordinated Action Plan for Environmental Education. This plan addresses itself to five major areas: Assessment, School Curriculum, Teacher Training, Vocational Training, and General Education of the Public. Goals and objectives are listed for each area. Organizations represented on the Council have given their formal approval to the Plan.

Work in the assessment area will be moving forward this fall with the distribution of several questionnaires. Work in the other areas will proceed as the subcommittees created last spring initiate their activities.

The Planning Group for the State Plan consists of the following:

Sigmund Abeles
State Department of Education
Hartford, Connecticut 06115
(203) 566-4825

David Basch
Board of Trustees
Connecticut State Colleges
Hartford, Connecticut
(203) 566-3040

Marshal T. Case, President
Connecticut Association for Environmental Education
2325 Burr Street
Fairfield, Connecticut 06430
(203) 259-6305

William Delaney, Jr.
Department of Environmental Protection
730 Silas Deane Highway
Wethersfield, Connecticut
(203) 566-3566

Donald Flight
Education Director
Connecticut Public TV
Hartford, Connecticut
(203) 278-5310

Alan Hugg
State Department of Education
Hartford, Connecticut 06115
(203) 566-3044

Anthony S. Keller
Commission on the Arts
340 Capitol Avenue
Hartford, Connecticut 06106
(203) 566-4770

Claire Reinhardt
State Department of Education
Hartford, Connecticut 06115
(203) 566-5223

Robert Saunders
State Department of Education
Hartford, Connecticut 06115
(203) 566-5223

Arthur E. Soderlind
State Department of Education
Hartford, Connecticut 06115
(203) 566-2283

Lawrence Steeves
Connecticut Science Teachers Association
Teacher - West Hartford Public Schools
West Hartford, Connecticut
(203) 233-8281

SCHOOL PROGRAMS AND ACTIVITIES:

Environmental education activities in Connecticut have accelerated over the past few years. While a number of schools have had programs related

to environmental education in their instructional offerings for some time the emphasis on the importance of a quality environment over the past five years has given much impetus both to the expansion and the intensification of these programs. The activities related to environmental education in Connecticut fall into three major categories:

I. Federal-State-local cooperation in fostering environmental education
II. Local initiatives in environmental education
III. State planning for environmental education

I. Federal-state-local cooperation in fostering environmental education.

Since the environmental education concept touches many subject matter areas recent efforts are being made beyond the disciplines of social studies and science, the two areas in which most of the environmental education thrust has been placed. The current definition of environmental education includes a number of terms often used in the past and to a considerable extent still in use today; for example, conservation education and outdoor education. The broader definition used for the purposes of environmental education activities in Connecticut today is "Environmental education is concerned with the interrelationships between man and his physical, biological, and cultural surroundings."

A number of curriculum bulletins issued by the Department of Education make reference to aspects of environmental education. The curriculum bulletin entitled "Science Education-Grades 7-12" issued in 1958 indicates that conservation is an important aspect of the junior high school science curriculum. In earth science, attention is given to a study of Connecticut's weather and climate, the patterns of erosion along the shore, geology, and oceanography. In biology some of the suggested topics for study are the relation of living things to the physical environment, the interrelationships among living things, and conservation.

State Department of Education publications in the social studies also include concepts impinging on the area of environmental education. Some of the objectives stated in the "Social Studies - Grades 7-12" (1965) bulletin are: to understand the relation of the physical environment to the life and culture of a people; to understand the kinds of resources essential in an industrial civilization as contrasted with an agricultural civilization; to understand how invention, science, and technology have given new values to certain resources and lessened man's dependence on other resources; and to understand the economic relations of people within their own nation and with other nations.

In more recent publications, such as, "Finding our Place in the World through the Study of Connecticut," a significant percentage of the syllabus is devoted to such topics as population, resources, manufacturing, transportation, communication, and the structure and services of government. This approach comes closer to the broad meaning of environmental education generally used today.

The curriculum guide, "Art Education: Kindergarten - Grade 12" (May, 1963), made references to and recommendations for including the arts in daily living, personal surroundings, and architecture, particularly at the secondary level. The 1967 bulletin, "Approaches for Setting Up Art History and Appreciation Programs at the Secondary Level," emphasized and focused research in the history of local community architecture and community growth as a part of the recommended program.

Under Title III ESEA, the Department of Education has participated in projects directed toward or involving environmental education. Two publications are noteworthy. RESCUE, Project OUTDOORS in Manchester, and C.O.P.E.S. (the Connecticut Outdoor Projects in Educational Services) have produced "Outdoor Education in Connecticut." The other publication is entitled, "Social Studies Concepts and Generalization - A Framework for Curriculum Development." This work, an outgrowth of Project DISCUSS, includes a number of topics concerned with environmental education under the headings of the various social science disciplines.

The staff of Project OUTDOORS has written a five volume set of Teachers Guides for Environmental Education. These five guides have been reproduced and sent to each school in the state.

Also initiated under Title III ESEA, were the Talcott Mountain Science Center in Avon, and Project Oceanology at Avery Point in Groton. The Center is currently self-sufficient and serves 46 school districts. It employs a staff of eleven full time and eight part time people with two full time personnel specifically for ecology and environmental concerns. Staff of the Center operate in the school districts, at colleges, or in the excellent facility maintained atop Talcott Mountain.

Project Oceanology is in its second year and serves 15 school districts on or near the shore of Long Island Sound. The first year of development has seen the acquisition and modification of two craft. One of these is capable of holding 50 people. It is equipped with stations and materials for biological and physical laboratory activities. A number of these activities are related to water pollution. The second craft is a whaler suitable for transportation to and from the larger boat. It is also used for other laboratory activities. Shore facilities have been rented from the University of Connecticut and modified to include aquaria and laboratory activities on the Sound. It is anticipated that approximately ten times that number will be accommodated next year.

Under financing from EPDA, the four state colleges have cooperated to prepare and offer materials and activities related to environmental education. The objectives here were to provide interdisciplinary activities in environmental education for the instructional program of the colleges and to run workshops for teachers at the local level. Although financial support has drawn to a close, the program is being continued.

Under Title V ESEA several activities have taken place. A curriculum guide in environmental education combining Social Studies and Science has been developed for grades 7 through 9 and sent to the schools.

A resource kit containing appropriate printed materials has been compiled and is available to schools on a loan basis. One of these kits was delivered for use in the [redacted] library bookmobile.

Also under Title V ESEA, the six New England States, New York, New Jersey and Pennsylvania have joined to form the Northeast Environmental Education Development system. This system has undertaken a number of projects designed to prepare and disseminate environmental education materials to the schools. Some of this group's activities follow:

1. Dissemination of "Environmental Education - Instructional Activities K-6 and 7-12," prepared in New York State to all appropriate schools in the nine states.

2. Development of a standardized Environmental Awareness test by Syracuse University.

3. Development of "An Environmental Repair Kit" in Connecticut. This kit contains 100 activities in air, water and soil pollution. Workshops have been conducted for teachers, supervisors, and administrators making use of these materials.

4. Development of six 15 minute videotapes in New Hampshire for TV use.

5. Development, at Southern Connecticut State College, of audio-tutorial units on air, water and noise pollution and population concerns. Workshops have been conducted making use of these units.

6. Workshops involving various agencies concerned with environmental education.

7. An audio-tutorial unit on the social implications of monitoring earth resources from space is being developed in Connecticut with particular emphasis on the northeastern United States. This is being accomplished with the aid of the National Aeronautics and Space Administration (NASA).

In addition, NASA has contracted with the nine state group to develop a similar set of materials for use across the United States. This work is also being done in Connecticut.

Again, at the Connecticut State level, copies of mathematics problems related to pollution were purchased from the State of Wisconsin and sent to appropriate level schools in Connecticut.

Under PL 91-516, Connecticut has, over the past two years, received four grants for projects ranging from curriculum development to teacher training.

The Department of Environmental Protection in cooperation with the Connecticut Audubon Society has conducted a number of teacher workshops based, in part, on the "People and Their Environment" series.

The Connecticut Tuberculosis and Respiratory Disease Association, in cooperation with the Department of Education, has made available electronic air pollution monitoring devices for use in earth science and biology classes. The devices, loaned to the schools for a week at a time, continuously monitor levels of particulates in the atmosphere. Data collection and analysis are performed by the students and teachers.

II. Local Initiatives in Environmental Education

Activities in environmental education vary from community to community. Since the interest in environmental education increased sharply, a number of publishers have been developing texts and other materials for distribution to the schools. Programs such as the "Science Curriculum Improvement Study," "Interaction of Man and the Biosphere," "The Intermediate Science Curriculum Study," and many others have environmental components. Many new social studies programs have materials in environmental education.

The problem in defining the number of environmental education programs in the state is brought about by the lack of precision in the definitions of the terms "environmental education" and "program." A questionnaire will be distributed to the schools this fall however in an attempt to get some quantitative data on activities in this area.

Towns and cities which have made particular efforts to provide environmental education experiences for their youngsters include: Norwich, Stamform, Fairfield, Wilton, Greenwich, Westport, Hamden, Norwalk, West Hartford, Manchester, Stonington, Hartford, Bridgeport, Rocky Hill, Enfield, and Bloomfield. This list is by no means all inclusive. Activities in these and other towns and cities range from course offerings with titles such as Environmental Education, Ecology, Science and Society, and Science and Man, to club and field activities involving both school and community.

Many towns in Connecticut are working with the 34 nature centers which are situated in various regions throughout the state.

Professional teacher, supervisor, and administrator's groups have played an important role in environmental education particularly in the conference and workshop area. Science, social studies, library, art and mathematics organizations have conducted many workshops and conferences or devoted parts of these events to environmental concerns.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Hamden League of Women Voters
Mrs. Joyce Phipps
Solid Waste Chairman
52 Westerfield Road
Hamden, Connecticut 06514

Guilford Free Library
Guilford, Connecticut 06437
Laurence Kingsbury

This library through the efforts of an assistant librarian, has responded to a need to identify the various activities, to pool information and establish a reference resource in support of various environmental activities. In addition to the environmental information center which has been in operation for the past year, the assistant librarian has managed a successful recycling program, has become the consultant to a number of adult and student groups, writes a weekly article in the local newspaper, The Shoreline Times, entitled "Environmmental Hotline."

New Canaan Nature Center Association, Inc.
Melville C. Thomason, Director
144 Oenoke Ridge
New Canaan, Connecticut 06840

Member of the Consortium of E.E. Councils, AAAS Commission of Science Education. "Seeks to provide natural science, conservation, and horticulture education services for the youth of the area." The Association conducts programs in 41 categories, many involving local schools.

Save the Wetlands Committee, Inc.
103 Bingham Laboratory
Yale University
New Haven, Connecticut 06520

To inform the people of Connecticut of the value and importance of tidal wetlands, their current status, the threat to their future, and what can be done to protect and preserve them in the public interest.

The Center for the Environment and Man
250 Constitution Plaza
Hartford, Connecticut 06103
Executive Vice-President: Robert Ellis
(203) 277-0133

One of their publications: "Toward a New System of Education." CEM is an independent, non-profit organization which incorporated in order to engage in scientific investigations of the phenomena and processes relevant to the reciprocal relationships between man and his environment, both natural and man-made. CEM conducts research in the areas of air and water pollution, land use, urban crises, transportation systems, health care systems, and law enforcement systems.

STOP
25 Sunny Valley Road
New Milford, Connecticut 06776

Sharon Audubon Center
Sharon, Connecticut

Teacher-naturalists here have helped in preparation of teaching materials.

Connecticut Audubon Center
2325 Burr Street
Fairfield, Connecticut 06430
259-6305

To become more aware of the immediate environment, teachers, volunteers and students can take a field trip in the area of the school, investigating the web of life that exists in a city and discovering together the variety of both natural and man made beauty in urban environments.

Also using live animals and plants, another program is an in-class discussion of basic characterists and requirements of all living things. To have a reverence for life is the basis of environmental responsibility.

The Connecticut Audubon also conducts school tours of the Larsen Sanctuary for grades 1, 3, and 5 in the Spring and for grades 2, 4, and 6 in the Fall. Information concerning the tours can be obtained from the Principal's office or by calling the Audubon Center.

The Center was awarded FY 1972 monies under the E.E. Act.

Faith-Man-Nature Group
Cider Mill Road
Andover, Connecticut 06232
Philip Joranson

Development of written supplemental curriculum materials focusing on environmental values and their foundations in theology, philosophy, ethics, and environmental science. This group was awarded FY 1972 monies under the E.E. Act.

West Rock Nature Recreation Center
New Haven Parks and Recreation Commission
New Haven, Connecticut

Mayor's Anti-Pollution Task Force
City Hall
Hamden, Connecticut 06517

Windward Oceanography Institute
119 Rowayton Avenue
Rowayton, Connecticut
Director: Dr. Howard M. Weiss
(203) 853-2202

Attempts to improve E.E. Curricula and teacher training by encouraging students and teachers to respond to real problems. Assisting the Director is a faculty of marine scientists; college, secondary and elementary teachers experienced in E.E.; and marine technicians. The Institute is a division of the Herman R. and Carol R. Shepherd Foundation, a non-profit Connecticut corporation. It is located in the waterfront community of Rowayton in Norwalk, on Long Island Sound. Its facilities include a marine laboratory with a sea water system, research vessels, floating ocean science laboratory and a wide range of laboratory and field equipment. The Institute functions as a year-round marine resource center for elementary and secondary schools, colleges, universities and general public. It enables students to participate in active on-the-water oceanographic investigations. Interdisciplinary approaches to E.E. are emphasized. Facilities are also available to marine scientists for research in all areas of oceanography. Studies dealing with the ecology of Long Island Sound are of special interest at the Institute. Programs have been or are being developed with the following: public and private school systems in Fairfield County and throughout Connecticut, cooperative educational agencies, University of Bridgeport Departments of Biology and Education, Fairfield University, Eastern Connecticut State College, Southern Connecticut State College, Connecticut State Technical Colleges, Columbia Teachers College, and many organizations interested in the environment. It also provides in-service workshops for teachers, academic programs to enrich school curricula, summer institutes and facilities for independent research.

Audubon Center
613 Riversville Road
Greenwich, Connecticut 06830

Teacher-naturalists here have helped in preparation of teaching materials.

Natural Science for Youth Foundation
763 Silvermine Road
New Canaan, Connecticut 06840
Director of Operations: Alan R. Mahl

Purpose of the Foundation is to encourage the establishment of new

natural science centers, youth museums, wildlife preserves and trailside museums in the nation. It makes available professional staff, without cost, for advice and consultation to organizations and communities.

Thames Science Center, Inc.
Gallows Lane
New London, Connecticut 06320
Executive Director: Robert Treat

League of Women Voters of West Hartford
19 Sunset Terrace
West Hartford, Connecticut 06107
Alice Kugelman, Director, Environmental Quality
(203) 521-6482

Planned Parenthood League of Connecticut
406 Orange Street
New Haven, Connecticut 06411
Executive Director: Jack Hillary Smith
(203) 865-0595

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Connecticut College
New London, Connecticut 06320
Dr. Richard H. Goodwin, Professor of Botany

Interdepartmental major offered to develop an understanding of the environmental problems facing mankind. Core courses taken from traditional discipline.

Mr. Glenn R. Harris
c/o Dr. Jelle de Boer
Department of Geology
Wesleyan University
Middletown, Connecticut 06457

Mr. Harris developed a project, "Feasibility Study of Quarries as Dumping Sites for Disposal of Solid Wastes," and presented a paper on it at the December 1971 meeting of the American Association for the Advancement of Science.

RESOURCE MATERIALS AVAILABLE:

1. State Department of Education:

a) "Recommendations for Adapting Art to E.E." by Robert Saunders, Art Consultant.

b) "Recommendations for the Science Education Component of an Environmental Education Program."

c) Man & His Environment, A Curriculum Unit for Grade 7 or 8.

2. American Education Publications
Science Division
55 High Street
Middletown, Connecticut 06457

OTHER PUBLICATIONS:

"Outdoor Education in Connecticut" - describes programs conducted by Project RESCUE, Project OUTDOORS in Manchester, and the Connecticut Outdoor Projects in Education Services (C.O.P.E.S.)

"Social Studies Concepts and Generalizations - A Framework for Curriculum Development" - an outgrowth of Project DISCUSS which includes a number of topics concerned with environmental education under the headings of the various social science disciplines.

POSSIBLE RESOURCE PEOPLE:

Thomas Baker, Director
Mid-Fairfield County Youth Museum
Westport, Connecticut

Myron Browning
Environmental Protection Research Institute
P. O. Box 4711
Waterbury, Connecticut 06714

Marshal Case
Mrs. C. B. Barnes
Connecticut Audubon Society
2325 Fun Street
Fairfield, Connecticut

Bill Guerrera
1 Nicholas Circle
Wolcott, Connecticut 06716

Interested in community action projects to deal with local environmental problems.

Bette Del Giorno
Project LIFE
Fairfield Public Schools
Fairfield, Connecticut

Odvard Egil Dyrli
Professor of Science Education
University of Connecticut
Storrs, Connecticut

Wrote "W.W." (The Clearing House, April, 1971).

Stanley J. Idzerda
Wesleyan University
Middletown, Connecticut 06457

Dr. John Klimas
Fairfield University
Fairfield, Connecticut 06430

Deborah B. Hill *
East Ridge Jr. High
Ridgefield, Connecticut 06877

Robert J. Stein *
Barlow Mountain School
115 Ballow Mountain Road
Ridgefield, Connecticut 06877

J. M. Trout *
Director of Curriculum
Board of Education
400 Main Street
Ridegfield, Connecticut 06877

* These persons are familiar with and/or have used the Group for E.E. Curriculum materials, developed in Philadelphia, Pennsylvania.

Lewis Mumford
Yale University
New Haven, Connecticut

Arthur D. Roberts
Professor of Foundations and Curriculum
University of Connecticut
Storrs, Connecticut

Wrote "E.E." (The Clearing House, April, 1971).

Paul Sears
Yale University
New Haven, Connecticut

Mrs. Rosalyn Switzer
Mrs. Phyllis Wallace
Watt Porowski
National Education Ombudsmen's Association
Box 311
Unionville, Connecticut 06085

Tom Malone
Dean, Graduate School
University of Connecticut
Storrs, Connecticut

Was one of the key planners for the International UN Conference on the Human Environment in Stockholm.

Thomas Tinsely, Jr.
Science Coordinator, K-12
Trumbull Public Schools
401 Stonehouse Road
Trumbull, Connecticut 06611
261-0335

MAINE

STATE E.E. CONTACT:

Wallace LaFountain
Curriculum Consultant
Maine Department of Educational and Cultural Services
Augusta, Maine 04330
(207) 289-2541

SCHOOL PROGRAMS AND ACTIVITIES:

Regional E.E. Program (REEP)
Wesley Willink
Yarmouth Intermediate School
Yarmouth, Maine

The Town of Yarmouth initiated a K-12 pilot program in 1968 utilizing a full-time coordinator financed by local funds. This program drew the attention of surrounding communities and the following year expanded to include the school systems of Freeport, Falmouth, and Cumberland-North Yarmouth. Today the program still continues with each system contributing one quarter of the expenses.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Land and Water Resources Center
University of Maine
Orono, Maine

Mr. Joseph M. Wunderle, Jr.
c/o Dr. Ronald B. Davis
Department of Botany and Geology
University of Main at Orono
Orono, Maine 04473

Did a study "Physical, Ecological, Economic and Sociological Effects of Residence Patterns of Recreationists on Four Maine Lakes" and reported on it at the December 1971 meeting of the American Association for the Advancement of Science.

Mr. Richard Alan Cohen
c/o Dr. Dana W. Mayo
Department of Chemistry
Bowdoin College
Brunswick, Maine 04011

He did a study "Detection and Estimation of Natural Regeneration Processes in the Upper Androacoggin River, Maine" and reported on it at the December 1971 meeting of the American Association for the Advancement of Science.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Department of Parks and Recreation
Keep Maine Scenic Division
Marshall T. Wiebe, Coordinator

Kennebec Valley Conservation Association
Vernon Keene, President

Maine Environmental Education Project, Title III, ESEA
Dr. Dean B. Bennett, Director
Yarmouth Intermediate School
Yarmouth, Maine 04096

The purpose of this project is to establish in the K-12 curriculums of Maine's schools interdisciplinary learning experiences which aim to develop in students a knowledge of the total environment and the role of man, an ability to participlate in activities for maintaining and improving the quality of the environment while meeting human needs, and a motivation to do so. The project provides for the training of coordinators to implement demonstration programs and assists communities in the establishment of programs through a variety of other approaches. In the area of teacher education the project staff develops and teaches in-service courses, undergraduate preservice and student teaching courses, and graduate programs.

Maine Division of the American Association of University Women
Box 114
York, Maine
President: Sally Bailey

Northeastern Environmental Education Development

"Environmental Education Instructional Activities" booklets were developed in the Fall of 1971 under a Title V grant by NEED, a nine state consortium. These booklets utilize basic environmental concepts - interdependence, scarcity, right vs. responsibility.

Maine Public Broadcasting Network
Alumni Hall
University of Maine
Orono, Maine 04473
General Manager: John Morison
(207) 581-7551

Mr. Morison is project director of activities leading to the development of demonstration model of statewide participation in the solution of a simulated environmental crisis through television programming, with FY 1972, E.E. Act monies.

Research Institute of the Gulf of Maine (TRIGOM)
96 Falmouth Street
Portland, Maine
(207) 773-2981

Natural Resources Council of Maine
20 Willow Street
Augusta, Maine 04330
Dr. Robert G. Mohlar, President
(208) 266-3101

The Natural Resources Council publishes a bulletin entitled, "Maine Environmental Bulletin," each month. It usually covers matters concerning the environment that are relevant to the public.

Conservation Education Foundation
Marshall T. Wiebe
Executive Director
Bryant Pond, Maine
(207) 289-2871, Bryant Pond 39

Bryant Pond Conservation School is being used for training of teachers from the University of Maine. The course(s) are taught by Dean Bennett. There is also a special teacher workshop to train elementary and secondary teachers in conservation education.

The Maine Highway Commission has been authorized to spend $510,000 in federal funds to remove non-conforming signs from along interstate, primary and scenic highways in the state. It will pay one billboard company an average of $100 each to remove 69 signs from roads in 29 communities.

RESOURCE MATERIALS AVAILABLE:

Environmental Education Program - Organization and Operation
Regional Environmental Education Program
Wesley Willink
Yarmouth Intermediate School
Yarmouth, Maine 04096

POSSIBLE RESOURCE PEOPLE:

Dean Bennett, Director
Maine E.E. Project
111 West Main Street
Yarmouth, Maine 64096

He is also director of the Conservation Education Association.

Erik Van de Bogart
Director, Educational Services
Maine Public Broadcasting Network
Alumni Hall
Orono, Maine 04473

Samuel Eliot
College of the Atlantic
Box 3
Bar Harbor, Maine 04609

MASSACHUSETTS

STATE E.E. CONTACT:

Raymond Gehling, Jr.
Sr. Supervisor of Conservation Education
State Department of Education
182 Tremont Street
Boston, Massachusetts 02111
(617) 727-5742

STATE PLAN ACTIVITIES:

A proposal to develop a state plan for E.E. was funded under the E.E. Act with FY 1972 monies.

Charles E. Roth
Massachusetts Advisory Committee on Conservation Education
Massachusetts Audubon Society
South Great Road
Lincoln, Massachusetts 01773
(617) 259-9500

SCHOOL PROGRAMS AND ACTIVITIES:

ECOS (Environment Center for Our Schools)
195 State Street
Springfield, Massachusetts 01103
733-8161
Director: Mr. Cliff Phaneuf

This program is funded by Title III (since 1971). It is an environmental school located in Forest Park which is a 745 acre city park located in the middle of the city. Children (200 a day) come here every day from the Springfield schools. Thirty per cent are either Black or Puerto Rican. The focus is outdoor education that uses an approach of four steps: first, students learn how to use their senses in the outdoor environment; then they study the interrelationships of the field community; then the water and forest communities. Lastly they compare the principles of all three communities. Teacher teams go from the center before and after student visits for preparation and follow up activities in the schools.

Seven staff members help on the program; in addition, they are on call for training activities for those wanting to set up similar programs.

The Center has developed a curriculum, and its own tests which test objectives - they found an increase in knowledge of 15% over a four day program.

The staff and facility are not able to handle requests from other schools outside the Springfield area. The Center is trying to help such schools locate local facilities, etc.

The Center has also administered teacher attitude tests in order to pinpoint what their needs are - training workshops are planned on the basis of the findings.

At the present time there are no summer activities at the Center.

Project EPIC
Donald Lambert, Director
Westfield, Massachusetts 01085
(413) 568-3759

Project SCENIC
Randall School
Auburn, Massachusetts 01501
(617) 832-2715

Project QUEST
Brockton High School
Brockton, Massachusetts 02402
(617) 588-7800

Project ADVENTURE
Robert Lentz, Director
775 Bay Road
Hamilton, Massachusetts 01936
(617) 468-1766

Thomas Eastman, Director
Science Department
Needham High School
Needham, Massachusetts 02192
(617) 449-4750

Conducts an E.E. program for the town, involving the use of an outdoor classroom at the Newman Junior High School.

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Center for Environmental Studies
Carl H. Reidell, Assistant Director
Williams College
Williamstown, Massachusetts 01267
(413) 458-7131, Ext. 336

CES is an interdepartmental research and educational facility which provides a focal point for undergraduate teaching and faculty research in environmental sciences. The Center relates the academic resources of the college to planning and development needs of the surrounding region, with emphasis upon the metropolitan hinterland. The Center also directs the Coordinate Program in Environmental Studies, an elective undergraduate program available to all students, regardless of major, which seeks to provide a broad liberal arts perspective on environmental issues.

Master of Arts Degree Program in Environmental and Urban Geology
Department of Geology
Professor D. W. Caldwell
Boston University

Students work with various agencies in fulfillment of requirements of the program. For instance, two students worked with the U.S. Department of the Interior, Geological Survey in Boston, and two worked with Roy Mann Associates, Landscape Architects and Environmental Planners of Cambridge.

Boston University Undergraduate Research Center for Environmental Studies

A completely student directed research group oriented towards cooperation of science and humantites students. Eventually Boston University will be petitioned to grant academic course credit for active participation in BUURC. A model program is "Accelerated Eutrophication: A Man-Made Problem" in that by examining this environmental problem from a multidisciplinary approach, "students will begin to appreciate diverse criteria inherent in many environmental situations." (OEE has this study on file.) Students are in the process of making the program more consumer-oriented, focusing attention on a program of consumer-awareness. In cooperation with the School of Public Communications at Boston University, the students are planning to produce a film on Accelerated Eutrophication. They will also begin to educate the consumer in cooperation with industry.

Boston College Environmental Center (BCEC)
Chestnut Hills
Massachusetts
Rev. Prof. James W. Skehan, S. J., Director
(617) 969-0100

The primary purpose of the Boston College Environmental Center is to foster and conduct research in interdisciplinary fields of environmental studies. Graduate as well as undergraduates participate in the activities. The center also serves a coordinating role in curriculum and degree program development in environmental and other interdisciplinary areas.

Environmental Center
Berkshire Community College
Massachusetts
Contact: George Hamilton

The Center is being constructed through State, Regional, and Federal grants. It has been designated as a "Regional Environmental Technical Training Center" by the Environmental Protection Agency. The College currently offers programs both in E.E. and in training for environmental occupations.

Paul Buckley
North Shore Community College
3 Essex Street
Beverly, Massachusetts 01915

Mr. Buckley is director of activities leading to the development of a process curriculum for community leaders with FY 1972 E.E. Act monies.

Hampshire College

The entire college exudes a down-on-the-farm atmosphere and is seemingly run under a philosophy of "practice what you teach." The school has several working farms on campus and is moving toward the goal of providing its own food supply. Work is also under way to build a microbiological sewage treatment facility to reclaim the college's sludge. And the school intends to landscape its hedgerows and forest borders in order to encourage wildlife to move on campus. In short, Hampshire aims to become as closed an ecosystem as possible. An Environmental Quality Program - offering lectures, seminars and research projects - adds formalized structure to the outdoor classroom experience.

Massachusetts Institute of Technology

For the slide-rule and test-tube set MIT offers extensive interdepartmental courses and laboratory research under the direction of the Interdisciplinary Environmental Council. Although no separate degree program in environmental science or engineering is offered, most departments have educational and research opportunities in environmental fields relating to their own disciplines. A few examples of courses offered: Cycles in the Ocean and Atmosphere, Environmental Impact of Nuclear Power, and Environmental Measurements Project Laboratory.

Southeastern Massachusetts University

SMU's Marine Biology and Marine Engineering programs provide an opportunity to "get more than just your feet wet." Both programs offer not only courses ranging from water pollution to larval fish development, but also "wet course work" that can involve scuba diving. Research facilities supporting the programs include a 20-acre waterfront site on nearby Gooseberry Island, special marine labs, and a 65-foot research vessel serving as a floating laboratory.

Springfield College

Geared to students preparing for environmental careers, the college offers a B.A. in Environmental Studies. Depending on their interests, students can take the technically oriented Nature Interpretation Program or the Conservation Program that emphasizes the social sciences. Both programs are designed to prepare students for positions in environmental planning, teaching and administration. Courses are also required in geology, education and psychology, as well as in such specialized areas as aquatic conservation and environmental design. A little frosting on the academic cake: a two-week study tour of New England called "Conservation Caravan."

University of Massachusetts

"Something for everybody," including a B.S. or two-year associate degree in environmnetal science, would seem to be U. Mass's underlying environmental studies motto. The Environmental Technology Program offers courses from other departments in the university, such as forestry and soil management, park administration, wood technology, wildlife management and public health. Other environmental organizations on campus include the Technical Guidance Center for Environmental Quality, the Environmental Quality Executive Council of the College of Agriculture, the Water Resources Research Center, the Committee on Environmental Quality and the popular and growing Institute for Man and His Environment, an interdisciplinary program of courses and research for the undergraduate.

Worcester Polytechnic Institute

WPI has introduced into its curricula environmental engineering, which is essentially a merging of civil engineering and biological sciences. WPI's Environmental Systems Study Program does not grant a degree though. Under the program students may concentrate in interdisciplinary environmental courses such as aquatic biology, thermal pollution, stream ecology and systems analyses. The program is designed to encourage students to work on interdisciplinary teams and on real engineering problems.

GROUPS AND AGENCIES WITH INTEREST IN E.E.

Ronald C. Broman
West Bridegwater Student Conservation Group, Inc.
P. O. Box 259
West Bridgewater, Massachusetts 02379

Mr. Broman is project director of a program involving student development of a process curriculum for the Community with E.E. Act FY 1972 monies.

Massachusetts Junior Conservation Camp
Thompson's Pond
Spencer, Massachusetts 01562
Contact: Mr, Arthur Silva, Director
Elizabeth Street
Littleton, Massachusetts 01460
(617) 486-4075

New England Aquarium
Dr, Warren Little, Director of Education
Atlantic Street
Boston, Massachusetts
(617) 742-8830

Citizens League Against the Sonic Boom
Dr. William A. Shurcliff, Director
19 Appleton Street
Cambridge, Massachusetts 02138
(617) 876-0764

The League was established by concerned citizens to see that no sonic booms are produced by civilian airplanes (i.e. supersonic transport aircraft.) It also endeavors to inform the public regarding the dangers of such booms and urges them to seek stricter control programs.

Sharon League of Women Voters
Mrs. Gloria Buxbaum, President
5 Peacock Hill
Sharon, Massachusetts 02067

Ecology Club
Steve Sirkis
Sharon High School
Sharon, Massachusetts 02067

Greater Boston Ecology Action Center
188 Prospect
Cambridge, Massachusetts 02139
(617) 354-9490

Member of Ecology Center Communications Council, Washington, D.C.

Cambridge Ecology Action
925 Massachusetts Avenue
Cambridge, Massachusetts 02138

Northampton Ecology Action
8 Bedford Terrace
Northampton, Massachusetts 01660

Vineyard Environmental Action Group
West Tisbury
Martha's Vineyard Island, Massachusetts 02575

Lowell Ecology
304 High Street
Lowell, Massachusetts 01852

Lake Cochituate Watershed Association
61 Lake Shore Road
Natick, Massachusetts 01760

Friends of Nature
Ellen R. Riggs, Corresponding Secretary
92 Arlington
Winchester, Massachusetts 01890

Friends of Nature is a non-profit conservation society dedicated to restoring the balance of nature to the mutual benefit of man and his plants and animal friends.

Environmental Problems Committee of the Citizens for Participation Politics
Mrs. Catherine Meyer, Chairman
11 South Street
Boston, Massachusetts 02111

The Committee is lobbying for legislation that they and others have filed concerning environmental problem abatement. It also operates a complaint program for citizens throughout the state. Copies of such grievances are issued to the enforcement agencies, legislators, and the governor.

Creative Studies
Dr. Jay Jehel Zif, President
167 Corey Road
Boston, Massachusetts 02146
(617) 277-1830

Other staff: William T. Archey

Concerned Citizens of Martha's Vineyard, Inc.
West Tisbury
Martha's Vineyard, Massachusetts 02575

Cape Cod Museum of Natural History Inc.
Brewster, Massachusetts 02631
896-3867
Director: Donal Schall
Educational Assistant: Robert Lucas

Has an environmental education program - serves Cape schools during the year. It is a center for environmental interpretation.

Association for the Preservation of Cape Cod
Peter Brown, Executive Director
Box 636
Orleans, Massachusetts 02653
(617) 255-4142

Regional Director
Federal Water Quality Administration
Northeast Region
J. F. Kennedy Federal Building
Room 2303
Boston, Massachusetts 02203

The Massachusetts Department of Public Works is now authorized to acquire land for public parks, recreation areas and wildlife preserves to replace land required for use in the federal highway program.

Environmental Concerns Organization
P. O. Box 121
Grovelenad, Massachusetts 01830
Mr. Osborne
(617) 374-6253

The Environmental Concerns Organization is primarily concerned with recycling different materials, containers, etc.

Cape Ann Society for Marine Scinece
Box 128
Lanesville Station
Gloucester, Massachusetts 01930

A non-profit organization set up by local residents to promote education and research about the marine environment.

Cape Ann Environmental Coalition

A united group composed of these: Action, Inc., Cape Ann Concerned Citizens, Cape Ann Sportsman's Club, Cape Ann Stripers, Essex Ct Green Belt Association, Gloucester Garden Club, League of Women Voters, Massachusetts Audubon Society, Rockport Conservation Commission, Rockport League of Women Voters, United Fisherman's Wives Organization, University of Massachusetts Marine Station, Conservation Commission.

Boston Society of Architects
320 Newbury Street
Boston, Massachusetts 02115
Executive Director: Lowel Erickson

The Greater Boston Committee on the Transportation Crisis
c/o Boston Industrial Mission
Father John Hinkley, Chariman
56 Boylston Street
Cambridge, Massachusetts 02138

A coalition of community groups committed to developing new transportation priorities.

Environmental Protection Association of Southern New England
Robert Russell, President
Box 34
Renoboth, Massachusetts

Environmental Education Center
The Elbanobscot Foundation, Inc.
Janet Staiano, Executive Director
Weir Hill Road
Sudbury, Massachusetts 01776
(617) 443-9931

A private corporation which conducts recreational and educational programs for interested groups and schools from Boston and the surrounding areas.

The Education Collaborative for Greater Boston
James Howard, Assistant Director
69 Brattle Street
Cambridge, Massachusetts 02138
(617) 495-4656

Has an environmental education committee.

Nashua River Watershed Association
President, Mrs. Hugh Stoddzrt
Groton, Massachusetts 01450

The Nashua River has been classified as one of the dirtiest rivers in the U.S. It has been selected as a model, The Nashua River Basin Water Quality Demonstration Program, and has received federal funding. The Association hopes to initiate an education program to complement clean-up activities.

Student Competitions on Relevant Engineering, Inc. (SCORE)
George Flint, President
Room 105, Anderson Hall
Tufts University
Medford, Massachusetts 02155
(617) 864-6900 Ext 6851

Forest Park Zoological Society, Inc.
David Warren, Executive Director
Box 295, Forest Park Station
Springfield, Massachusetts 01108
(413) 733-2251

The Zoological Society has cooperated with the School Department in its ECOS program by providing volunteers to help outdoors, and to provide docents to take slide shows pertaining to nature and ecology to area schools on a regular basis. The FPZS also provides a Zoomobile which is a special vehicle to transport small animals for on-site demonstrations by the Park Naturalist. The Springfield Park Department provides an interpretive naturalist who conducts educational programs in all phases of natural science for all groups that come into Forest Park.

Springfield Science Museum
Mr. Korkosz, Director
Springfield, Massachusetts

Technical Guidance Center for Environmental Quality/ Cooperative Extension Service
Director, Warren Litsky
University of Massachusetts (Marshall Hall)
Amherst, Massachusetts 01002
(413) 545-0347

During the four years in which the Center has been active it has acted as an information and referral service entirely related to environmental problems.

New England Biological Association
Dr. Donald J. Schmidt
Fitchburg State College
Fitchburg, Massachusetts 01420

Founded in 1915 - affiliated with the National Association of Biology Teachers. Membership: high school biology teachers, college biology professors, and their students, and interested citizens. Activities: "primarily educational, carried out during four annual meetings designed to bring teachers and students, and citizens into contact with the biological world about them." Fall and spring meetings are always field trips and outdoor activity. Each winter a joint meeting with the New England Chemistry Teachers Association is held where topics of mutual concern are discussed.

David Ives
WGBH Educational Foundation
125 Western Avenue
Boston, Massachusetts 02134

Received FY 1972 funds under the E.E. Act for development of a TV Program for dissemination to the general public.

Charles E. Roth
Massachusetts Audubon Society
South Great Road
Lincoln, Massachusetts 01773

Received FY 1972 funds under the E.E. Act for development of curriculum materials for use in formal and non-formal activities.

Air Conservation Council, Hampden and Berkshire Counties
Chairman, Gary Garrison
Massachusetts Mutual Life Insurance Company
Springfield, Massachusetts

The Council has worked with George Hamilton at the Environmental Center, Berkshire Community College. It is interested in education outreach programs. Major goal of the Council: education of the general public in order to create a greater awareness of urgency of environmental problems and the role which each individual must play in solutions.

The Council also seeks cooperation with business and industry in achieving a cleaner environment.

RESOURCE MATERIALS AVAILABLE:

Publications available from Center for Environmental Studies, Williams College, Williamstown, Massachusetts:

1. Berkshire Panel for the Public Environment: An Assessment
2. Solid Waste Practices in Berkshire County.
3. Leisure Homes in the Berkshires
4. The Courporation and the Environment: A Report on the October 1968 Conference

Conservation Education Center
Contact: Charles Roth
Massachusetts Audubon Society
Lincoln, Massachusetts 01773

Man and the Environment - Student Text
Man and the Environment - Teacher's Edition
Man and the Environment - Laboratory Supplement

Educational Research Council of America

Published by: Houghton Mifflin Company
110 Tremont Street
Boston, Massachusetts 02107

A Directory of Environmental Groups

A directory of New England groups issued by the New England SCOPE. Available from:

Environmental Protection Agency
Region I
2303 JFK Building
Boston, Massachusetts 02203

Environmental Education, Curriculum and Evaluation Report of the Education Collaborative for Greater Boston

Prepared for EdCo by Mrs. Jennifer Pirie, Putnam House, 69 Brattle Street, Cambridge, Massachusetts 02138; $1.25.

Contents: Why E.E.? Aims of environmental workshops, description of environmental workshops - urban ecology (Dorchester), suburban ecology (Concord), resources and ideas in E.E.

Environmental Center for our Schools (ECOS) Curriculum Guide, Grades 4, 5, and 6.

Available from: ECOS, ESEA Title III
195 State Street
Springfield, Massachusetts 01103

Millipore Corporation
Educational Division
Ashby Road
Bedford, Massachusetts 01730

POSSIBLE RESOURCE PEOPLE:

Gary Liss
S.O.A.P.
158 Freefer Hall
Tufts University
Medford, Massachusetts 02155

Dr. Bradford Washburn
Director, Boston Science Museum

A nationally prominent figure as an explorer and science museum administrator, who encouraged the establishment of the Squam Lakes Science Center at Holdnerness, New Hampshire.

Harold Wiper
Newton High School
Walnut Street
Newtonville, Massachusetts 02160

Wrote on water pollution investigations for the secondary or collegiate student for a National Association of Biology Teachers publication.

Bernard I. Sohn
Director Educational Division
Millipore Corporation
Bedford, Massachusetts 01730

Wrote on water pollution investigations for the secondary or collegiate student for a National Association of Biology Teachers publication.

W. Moomaw
Williams College
Williamstown, Massachusetts 01267

Frank Manheim
Woods Hole Oceanographic Institution
U.S. Geological Survey
Woods Hole, Massachusetts

Member of advisory committee, Earth Science Education Program.

Douglas McConnell, Coordinator
POLIS 76
1000 Massachusetts Avenue
Cambridge, Massachusetts 02138
(617) 492-7000

Michael Spock
Director, Boston Children's Museum

Stephen Winter, Chairman
Department of Education
Tufts University
Medford, Massachusetts 02155
(617) 628-5000 Ext. 328

John Brainerd
Springfield College
Springfield, Massachusetts

Interested in teacher training programs in E.E.

George Hamilton
Berkshire Community College
Massachusetts

Director, Berkshire Community College Environmental Center. Currently serving on the Board of Directors of the National Association for E.E., The New England Regional Commission Advisory Board for the Tipton, Vermont Environmental Center, The Commonwealth of the Massachusetts Environmental Task Force, Vice Chairman of the Air Conservation Council of Berkshire-Hampden County, Executive Committee of the Berkshire Consortium for Higher Education, and Executive Committee of the Berkshire Manpower Council. His most recent published work is that of a contributing author for the text Man and Environment, edited by McCabe and Mines and published by Prentice Hall, Inc. He attended the April, 1971 meeting of the National Association for E.E. He and his staff at the College's Environmental Center have worked closely with the Air Conservation Council for Hampden and Berkshire Counties in the development of implementation of plans and programs.

Mr. John E. Jacobus
Lexington Public Schools
146 Maple Street
Lexington, Massachusetts

Coordinator of Outdoor Studies - Harrington School.

James Lakis
Educational Development Center
Newton, Massachusetts

Member of advisory committee, Earth Science Education Program.

Leonard Fein
Director of Research
MIT-Harvard Joint Center for Urban Studies

Elaine Heumann Gurian
240 Clinton Road
Brookline, Massachusetts 02146
(617) 106-1729

Specialty: Art. Fields of specialization: training teachers and paraprofessionals, methods and materials in elementary and pre-school art, curriculum development use of low cost, household and scrap materials, urban art and recreation programs.

Other interests include coordinator of programs for interdisciplinary training in urban settings. Has worked with the Children's Museum of Boston, and presently works with "Summerthing" as an art consultant.

Michael Mears
Executive Director
Massachusetts Executive Committee for Educational TV.

R. Coppinger
Hampshire College
Amherst, Massachusetts

Lynn Miller
Hampshire College
Amherst, Massachusetts

Peter Cotton
National Alternative Schools Program
University of Massachusetts
Amherst, Massachusetts 01002

William Mathews
Professor of Civil Engineering
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

Interested in offering environmental management courses at MIT.

Sidney Simon
Professor of Education
University of Massachusetts
Amherst, Massachusetts

Interested in value clarification and attitudinal analysis and decision making.

William Mayo
President, American Society for Ecological Education
c/o Curry College
Milton, Massachusetts
(617) 333-0500

Dr. Arthur Bartfield
University of Massachusetts
Amherst, Massachusetts

Randolph Bromery
Acting Vice Chancellor
University of Massachusetts
Amherst, Massachusetts

Member of Advisory Committee, Earth Science Education Program.

Anthony Mercurio
Bristol Community College
Massachusetts

Familiar with Man and Environment - Miami-Dade Jr. College Curriculum.

Dr. Peter A. Franken
Bolt, Beranek and Newman
Cambridge, Massachusetts

Expert on noise pollution.

John Aiken
Harvard University

Expert on philosophy of education.

NEW HAMPSHIRE

STATE E.E. CONTACT:

Mr. William B. Ewert
Consultant, Science Education
State Department of Education
64 North Main Street
Concord, New Hampshire 03301
(603) 271-3293

STATE PLAN ACTIVITIES:

The Environmental Education Planning Council of New Hamphsire will complete the development of New Hampshire's Environmental Education Plan by September 1973. This plan will contain a statement and prioritization of the State's environmental education needs; an evaluation of statewide and regional resources for environmental education available to local communities; and a Community Environmental Education Model or Models which should lead communities to the implementation of environmental action. For further information contact:

DeWolf Merriam, Executive Secretary
Environmental Education Planning Council of New Hampshire
5 South State Street
Concord, New Hampshire 03301
(603) 224-6651

E.E. PROGRAMS FUNDED FOR **1972**:

Robert B. Todd
Piscataquog River Watershed Association
Old Francestown Road
New Boston, New Hampshire 03070

The development of a process curriculum with students serving as community instructors.

Roland M. Miller
Hanover-Norwich-Vermont
Dresden School District
Lebanon Street
Hanover, New Hampshire 03755

The development of a process curriculum for grades K-12 which utilizes volunteer aids.

Richard Wolfson
Kearsarge Regional High School
North Sutton, New Hampshire 03260

The development of written suplemental curriculum materials for use by high school classes and community residents.

James W. Morrison
St. Anselm's College
Manchester, New Hampshire 03102
(602) 669-1030, Ext. 222

The development of a process curriculum for the secondary educational level, focusing on water monitoring and testing of tributaries of the Merrimack River. Several high schools are participating.

William B. Ewert, Chairman
Environmental Education Planning Council of New Hampshire
5 South State Street
Concord, New Hampshire 03301
(603) 224-6651

Statewide evaluation and dissemination (see STATE PLAN ACTIVITIES above).

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Dr. O. F. Hall, Director
Institute of Natural and Environmental Resources
Pettee Hall
University of New Hampshire
Durham, New Hampshire 03824
(603) 862-1020

The organization is a functional unit of the University which combines teaching, research, and community contact work in a single staff of 32 professionals. The undergraduate program offers Bachelor's Degrees in forestry, wildlife management, community development, resource economics, soil science, hydrology, and environmental conservation.

Gordon L. Byers, Chairman
Water Resources Research Center
University of New Hampshire
Durham, New Hampshire 03824
(603) 862-2144

The Water Resources Research Center conducts research relating to water resources and usage as well as training scientists through this research. It is a focal point for faculty and student projects in this connection.

William Henry, State Director
Title I Higher Education Act
Resources Development Center
Wolff House
University of New Hampshire
Durham, New Hampshire 03824

Adult environmental education is given a top priority in the distribution of funds to colleges in the state. The Center has funded more than 20 adult programs in environmental education and conservation.

Gordon J. F. MacDonald, Director
Dartmouth Environmental Studies Program
Dartmouth College
Hanover, New Hampshire 03755

The Environmental Studies Program, instituted in 1970-71 and expanded in 1971-72, may be undertaken in addition to a regular major or as part of a modified major. Snudents may also elect several of the courses individually.

Dr. Robert H. Frey
Plymouth Conservation Education Program
Natural Science Department
Boyd Hall
Plymouth State College
Plymouth, New Hampshire 03264

A multidisciplinary course in conservation education fulfilling requirements in social studies and/or natural sciences offered both to full-time students and to evening division students.

Ty G. Minton
Director of Environmental Education
Antioch Graduate Program in Environmental Education
Antioch Graduate School of Education
Harrisville, New Hampshire 03450

Master's program in conservation and environmental education.

John King
Director of Environmental Education
Canaan College
Canaan, New Hampshire 03741

The search for some answers to basic existential questions constitutes the primary effort of the environmental education program. In their search the faculty and students scrutinize the physical surroundings of the college, the countryside, the region, and the world at large.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Charles Buck, 4-H Youth Development Agent
Hillsborough County 4-H Foundation, Inc.
Hillsborough County Extension Service
Box 306
Milford, New Hampshire 03055

They have a Natural Science Day Camp.

Gilbert E. Merrill, Director
Robert Searles, Associate Director
Squam Lakes Science Center
P. O. Box 146
Holderness, New Hampshire 03245
(602) 968-7194

A non-profit venture. Started school programs in January of 1969. Serves schools and the public in providing E.E. and in promoting ecological awareness. The Center publishes a newsletter.

Forrest Bumford, Director
Air Pollution Control Commission
61 South Spring Street
Concord, New Hampshire 03301

William Healy, Executive Director
Water Supply and Pollution Control Commission
Prescott Park
105 Loudon Road
Concord, New Hampshire 03301

Richard Wentz, Chief
Information and Education
New Hampshire Fish & Game Department
34 Bridge Street
Concord, New Hampshire 03301

Seacoast Anti-Pollution League
Route 84
Hampton Falls, New Hampshire 03844

To promote the wise use of natural resources of the seacoast region and to alert and educate the community and relevant government agencies to threats to the environment.

John Nutter, Education Director
Appalachian Mountain Club
North Country Regional Office
Gorham, New Hampshire 03581

Conducts numerous hands-on outdoor workshops throughout the year for teachers.

George Hamilton, Director
New Hampshire Division of Parks
State House Annex
Concord, New Hampshire 03301

Maintains 47 state parks some of which have specific ecological units.

Ted Natti, Director
New Hamphsire Division of Resources and Development
State House Annex
Concord, New Hampshire 03301

Conducts public education on multiple use, fire danger, insect damage, resource value and development.

William Humm, Assistant Planning Director
Resource Planning Office
Office of State Planning
State House Annex
Concord, New Hampshire 03301

Coordinates planning and management of the state's land and water resources.

New Hampshire Natural Resources Council
5 South State Street
Concord, New Hampshire 03301

Fosters common understanding of environmental problems between utilities, businesses, civic groups, and conservation organizations.

Waldo Stone, Director
Otter Lake Conservation School
Greenfield, New Hampshire 03047

Hands-on resident camp for teachers and their students. An environmental education process experience concerned with all aspects of man, his influence on and interaction with his surroundings.

Marie Tulin, Director
Pembroke Environmental School
120 Center Road
Concord, New Hampshire 03301

Environmental education camping experience for 4th and 5th grade students and their teachers.

Society for the Protection of New Hampshire Forests
5 South State Street
Concord, New Hampshire 03301

Maintains 17 reservations totaling 7500 acres. Operates conservation camps for students and teachers. Active in environmental education programs. Publishes several guide books and a quarterly magazine. Manages Monadmock Eco-Center, London Road, East Westmoreland, New Hampshire, and Lost River Interpretive Center, Kinsman Notch, New Hampshire.

Paul Fiske, External Affairs Coordinator
Cooperative Extension Service
University of New Hampshire
Durham, New Hampshire 03824

Environmental quality is the thrust of an extensive public education effort. Workshops are held to assist groups in solid waste management and recycling projects. A technical team is maintained to assist local conservation commissions. School curriculum materials are being produced.

Stephen Harper, Information and Education Officer
White Mountain National Forest
P.O. Box 638
Laconia, New Hampshire 03246

Provides teacher training workshops; curriculum materials and lesson plans for environmental education, and professional help in the development, layout, and use of school-site environmental learning areas.

Delmar Goodwin, Director
Regional Center for Educational Training
Wilson Hall
Dartmouth College
Hanover, New Hampshire 03755

Offers a course for grade 4-9 teachers in the Hanover area designed to consider the total environment and factors influencing it that are relevant to children's understanding.

Alvord Wildlife Sanctuary
Bear Island
Lake Winnipesaukee, New Hampshire 03246

A 250-acre sanctuary offering two courses in conservation education for teachers and camp counselors. Operated by the American Humane Education Association through Plymouth State College, Plymouth, New Hampshire.

Richard Fabian, Environmental Education Director
Tilton School Environmental Studies Program
Tilton School
Tilton, New Hampshire 03276

Tilton School is working to implement its Water Pollution and Environmental Studies curriculum in neighboring schools.

David Allen, Director
U.S.D.A. Soil Conservation Service
Federal Building
Durham, New Hampshire 03824

The Soil Conservation Service has consulted with numerous schools in the areas of soil science and conservation, design of school site natural study areas and layout of nature trails.

Tudor Richards, Executive Director
Audubon Society of New Hampshire
63 North Main Street
Concord, New Hampshire 03301
(603) 244-1896

Operates Project SEE (School Environmental Education). It is administered by the Audubon Society of New Hampshire for Concord's Union School District. Activities have ranged from a community bus and canoe workshop studying the Merrimack River's flood plain and pollution to a school-community project recycling 2,000 Christmas trees into chips for mulching an eroding school playground. Much material is loaned to teachers, and flyers describing projects or events are sent to a list of several hundred teachers and others. The Audubon Society also maintains and staffs as nature and education centers Spruce Pond Camp in Allenstown, Willard Pond Center in Antrim, and Paradise Point in Hebron.

POSSIBLE RESOURCE PEOPLE:

Paul Shepard
Environmental Studies Program
Dartmouth College
Hanover, New Hampshire 03755

Albion Hodgdon
Professor of Botany
Nesmith Hall
Durham, New Hampshire 03824

Co-founder of Natural Preserves Forum
University of New Hampshire Natural Areas Committee

Dr. Peter Allen, Research Forester
Division of Resource Development
State House Annex
Concord, New Hampshire 03301

Dr. Robert Chaffee
Dartmouth Museum
Hanover, New Hampshire 03755

Randall Morse
Monadnock Eco-Center
London Road
East Westmoreland, New Hampshire 03467
Winter address: Keene High School
Arch Street
Keene, New Hampshire 03431

Open weekends, June and September; daily, June 16-September 3.

James Mullins
Audubon Society of New Hampshire
63 North Main Street
Concord, New Hampshire 03301

John Nutter, Education Director
Appalachian Mountain Club
North Country Regional Office
Gorham, New Hampshire 03581

Kurt Olson, Director
Beaver Brook Association
Brown Lane
Hollis, New Hampshire 03049

Allie Quinn
Rayton Road
Hanover, New Hampshire 03755

Ned Therrien
White Mountain National Forest
Box 638
Laconia, New Hampshire 03246

Richard B. Weyrick, Associate Professor
Pettee Hall
University of New Hampshire
Durham, New Hampshire 03824

Brian Chabot
Professor of Botany and Ecologist
Nesmith Hall
University of New Hampshire
Durham, New Hampshire 03824

William Connell, Chairman
New Hampshire Chapter of Nature Conservancy
31 Edgewood Road
Durham, New Hampshire 03824

Ronald Bailey
Director of Environmental Studies
Hanover-Norwich-Vermont-Dresden School District
Lebanon Street
Hanover, New Hampshire 03755
(603) 643-3431

Leslie Clark, Education Director
Society for the Protection of New Hampshire Forests
5 South State Street
Concord, New Hampshire 03301
(603) 244-9945

Paul Bruns, Professor
Institute of Natural and Environmental Resources
Pettee Hall
University of New Hampshire
Durham, New Hampshire 03824

RHODE ISLAND

STATE E.E. CONTACT:

H. Wells French
Consultant, Program Development
State Department of Education
Hayes Street
Providence, Rhode Island 02908
(401) 277-2821

STATE PLAN ACTIVITIES:

There is at present no formal state plan for environmental education for Rhode Island. After three meetings (December, 1971 - sponsored by the University of Rhode Island; October, 1972 - sponsored by the State Department of Education and URI with funds provided by the Northeast Environmental Education Development Project (NEED); June, 1973 - at the Massachusetts Institute of Technology and funded again by NEED) enough direction emerged and persons/groups recognized so that a group could be operative, given legitimacy and funding. In October, 1973, Ecology Action for Rhode Island, in cooperation with the State Department of Education, URI, and Rhode Island College (RIC), submitted a modest proposal to NEED, which was funded, for a coordinator/writer who would work with a three member task force from Ecology Action and a 40 member advisory committee drawn from concerned individuals, interest groups and the public. The group will assess the state of the art in Rhode Island, assess other states' activities and plans, survey sites and resources within the state, consider the ideas and suggestions of the committee's members and the groups they represent, and develop a list of recommendations concerning environmental education for submission to the State Department of Education. Ecology Action hopes to complete this process in April, 1974.

E.E. PROGRAMS FUNDED FOR 1973-74:

Girl Scouts of Rhode Island
333 Grotto Avenue
Providence, Rhode Island 02906 $15,000

A program, postponed from 1972-73, designed to develop, test and staff a traveling mini-lab for environmental education. The mini-lab will contain testing equipment, a variety of materials and will be staffed by two teachers experienced in environmental education. The mini-lab will visit scout camps throughout Rhode Island during the summer and then extend its activities to the general public.

H. Wells French
State Department of Education
Hayes Street
Providence, Rhode Island 02908 $ 8,996

"Narragansett Bay Heritage" is an interdisciplinary program designed to

provide a seventh-grade class in 13 communities with the process-oriented training necessary to use the equipment and materials provided. The equipment and materials, composed of water quality test kits, various maps and charts ranging from a 1648 map to the latest NOAA chart, resource materials, ERTS satellite imagery and a camera, will be used by these classes to establish monitoring stations on the bay or its estuaries, to supply that base-line data to the appropriate agencies, to examine the relationship of the bay to the state's development, to investigate land usage, and to become aware of personal and community involvement.

SCHOOL PROGRAMS AND ACTIVITIES:

Project EARTH
c/o Carlo Gamba
Cranston School System
Park Avenue
Cranston, Rhode Island 02910

Project EARTH, a former Title III program initiated in 1968, is an environmental education program designed to allow urban elementary children the opportunity to learn the importance of proper utilization of our natural resources. The field work is conducted within Cranston and at the W. Alton Jones Campus of U.R.I.

Project MALO
c/o Ida Jackson
Warwick Veteran's Memorial High School
Warwick, Rhode Island 02886

This interdisciplinary approach to outdoor education was initiated as a Title III mini-grant last year and incorporated as a regular program for this year. Utilizing the community's resources as well as U.R.I.'s W. Alton Jones Campus the program is intended to let students discover how their school works, in all subject matters, grows from and fits into man's relationship to his environment. The key to the project rests with the investigations and a "quest" period which allows the student to experience creative opportunities.

Project Ocean Study
c/o August Botelho
Guiteras School
Bristol, Rhode Island 02809

Project Ocean Study, another former Title III mini-grant, provides the opportunity for junior high school students to investigate the marine environment, to explore salt marshes, to examine the interrelationship of various components of the environment and to sense the interdisciplinary aspects of environmental education.

Project Marine Environment
c/o Dave Whittaker
Tollgate High School
Warwick, Rhode Island 02888

A Title III project, involving both Warwick and Cranston, is designed to allow students from both communities to elect what is in effect a sophisticated oceanography/environmental education course. The student has an opportunity to investigate the marine environment from a land-based site or from the project's boat which utilizes the project's oceanographic equipment.

The following schools/systems are among those that have developed or are developing either Environmental Study Areas (ESA's) or outdoor environmental activities:

South Kingstown Junior High School -ESA
c/o Robert Smith, Principal
South Kingstown, Rhode Island 02879

Jamestown School -ESA
c/o D. Rogers Chase, Principal
Lawn Avenue
Jamestown, Rhode Island 02835

Middletown Middle School -ESA
c/o James MacGuire, Principal
Aquidneck Avenue
Middletown, Rhode Island 02840

Western Coventry School -ESA
c/o John Ruzanski, Principal
Summit Rotary
Greene, Rhode Island

Cumberland School System Outdoor Learning
c/o Robert Condon, Superintendent
Mendon Road
Cumberland, Rhode Island 02864

Coventry School System Outdoor Learning
c/o Thomas Marron
Coventry High School
Foster Drive
Coventry, Rhode Island

Scituate Jr./Sr. High School Outdoor Learning
c/o Robert Kuhn
Rockland Road
North Scituate, Rhode Island

UNIVERSITY AND COLLEGE PROGRAMS AND ACTIVITIES:

Environmental Education Committee
Ellsworth Starring Co.
c/o Richard Green, Chairman

Rhode Island College
Providence, Rhode Island 02908

In response to the need for an interdisciplinary approach to problems in environmental education, a faculty group representing several departments formed the committee. The committee is concerned with the following functions:

- -An identification of resources available to the RIC Environmental Education Committee
- -An investigation into the various E.E. models currently available
- -A determination of faculty and student views on the goals and purposes of any proposed E.E. program at RIC
- -The development of a philosophy and a strategy for implementation of E.E. at RIC, including estimates of the impact on faculty and staff requirements, space and budget.

Environmental Education Program
c/o William Croasdale
U.R.I.
Kingston, Rhode Island 02881

Under the leadership of the Education Department, URI has established an E.E. major, in both the undergraduate and graduate level, by utilizing unique combinations of existing courses. URI is presently developing several new courses, at the undergraduate level, in E.E.

Information concerning many other E.E. activities within different colleges and departments, as well as at the W. Alton Jones Campus' E.E. center, can be obtained from Dr. Croasdale.

GROUPS AND AGENCIES WITH INTEREST IN E.E.:

Norman Bird Sanctuary
Third Beach Road
Middletown, Rhode Island 02840

A wildlife refuge with a year round Education program.

Water Pollution Control Board
Department of Health
Davis Street
Providence, Rhode Island 02908

Water quality monitoring and pollution classifying.

Division of Air Pollution Control
Davis Street
Providence, Rhode Island 02908

Water Resources Board
265 Melrose Street
Providence, Rhode Island 02907

Responsible for the mapping and classifying of R.I.'s water resources.

Statewide Planning
265 Melrose Street
Providence, Rhode Island 02907

Concerned with land usage and long range trends and planning.

Environmental Council of Rhode Island, Inc.
40 Bowen Street
Providence, Rhode Island 02903

A representative state-wide organization, affiliated with the National Wildlife Federation, primarily devoted to the wise use, preservation, aesthetical appreciation, and restoration of wildlife and other natural resources.

Ecology Action for Rhode Island
286 Thayer Street
Providence, Rhode Island 02906
(401) 274-9429

Ecology Action for Rhode Island, a non-profit volunteer organization, was founded on the Brown University Campus in 1969 and has since moved into the Providence community. The major goals of this group are 1) to environmentally educate individuals, industry and the community, 2) to create and operate environmental action projects, 3) to encourage research and 4) to encourage the enforcement of laws relating to the conservation of resources and the maintenance of the environment.

Earthrise, Inc.
P.O. Box 120
Annex Station
Providence, Rhode Island 02901

A non-profit organization which is developing a comprehensive approach to futures research, education and design. Futures research is the systematic study of the future consequences of present social and environmental problems.

Audubon Society of Rhode Island
40 Bowen Street
Providence, Rhode Island

The purpose of the Audubon Society is to foster conservation of animal life, plant life, habitat, unique areas via a general public conservation education and by focusing the public's attention on resource problems. The Audubon Society provides leadership when resource problems arise. They also provide a full time teacher,made available to R.I.'s public schools on a contract basis, who works in the classroom and helps in the development of ESA's and other outdoor activities.

Save the Bay, Inc.
655 Main Street
East Greenwich, Rhode Island 02818

A non-profit organization concerned with the conservation of R.I.'s greatest resource - Narragansett Bay and its estuaries. Save the Bay makes available

resource people for the schools and the general public and provides materials on the Bay as well. It keeps itself and the state aware of environmental questions concerning the Bay.

E.E. TRAINING ACTIVITIES:

A training team which evolved from "Narragansett Bay Heritage" is in existence in Rhode Island. The team utilizes process education in the environment and deals with such things as problem-solving, developing investigations, teaching/learning strategies and inter-personal relations/communications in their workshops. Their workshops, both content and method, are based upon those proven successful by the U.S. Forest Service in its E.E. activities. Further information can be obtained from the state E.E. contact person.

POSSIBLE RESOURCE PEOPLE (those whose name or agency is not listed above)

Stuart Hale
Director, Coastal Resources Center
Graduate School of Oceanography
URI, Bay Campus
Narragansett, Rhode Island 02882

Thayer Shafer
Marine Advisory Service
URI Seagrant Program
Bay Campus
Narragansett, Rhode Island 02882

Derek Bradford
School of Landscape Architecture
Rhode Island School of Design
Providence, Rhode Island 02906

Robert E. Lee
Soil Conservation Service, U.S.D.A.
Quaker Lane
West Warwick, Rhode Island

Bradford Monahon
I & E Officer
Department of Natural Resources
Park Street
Providence, Rhode Island 02908

James Verds
R.I. Junior College
East Street
Warwick, Rhode Island 02888

Marcia Miosky
c/o League of Women Voters
41 Seekonk Avenue
Providence, Rhode Island

VERMONT

STATE E.E. CONTACT:

Dr. Karlene Russell
Director of Early Childhood, Elementary and Secondary Education
State Department of Education
Montpelier, Vermont 05602
802-223-2311 (Ext. 443)

STATE PLAN ACTIVITIES:

None

ENVIRONMENTAL EDUCATION PROGRAMS FUNDED FOR 1972:

John Horsley
Bolton Institute
139 Main Street
Brattleboro, Vermont 05301

The development of a process curriculum for governmental employees.

Frederick Mold
Fairbanks Museum of Natural Science
83 Main Street
St. Johnsbury, Vermont

A plan for the development of an urban environmental education center to serve both schools and the community.

Seward Weber
Vermont Natural Resources Council
97 State Street
Montpelier, Vermont 05602

For a pilot workshop to encourage conservation groups to make their resources available to local schools.

UNIVERSITY & COLLEGE PROGRAMS & ACTIVITIES:

The University of Vermont
College of Agriculture and Home Economics
Environmental Studies Program
Burlington, Vermont
Dr. E. C. Schneider, Chairman
802-656-2000

GROUPS & AGENCIES WITH INTEREST IN E.E.:

Vermont Natural Resources Council
97 State Street
Montpelier, Vermont 05602
Mrs. Garland, Chairman
Seward Weber, Executive Director
802-229-9496

Northeast Education Action Center
P.O. Box 173
St. Johnsbury, Vermont 05819
Max Money, Director
802-626-9306

Vermont Environmental Center, Inc.
Ripton, Vermont 05766
Dr. Andrew Nelson
802-388-7833

The Vermont Environmental Center is a private organization which offers teacher-training workshops in such areas as ecology, water-quality, and natural resource management. It also offers experimental workshops in environmental education. These workshops provide the necessary materials for teachers to develop curricula and to teach environmental subjects in their regular classes. A follow-up program aids and encourages such activity by providing a formal framework and allowing credit for project development.

Vermont Environmental Education Planning Association
97 State Street
Montpelier, Vermont 05602
Chairman: A. John Holden

Agency of Environmental Conservation
Air Pollution Control
Montpelier, Vermont 05602

Fairbanks Museum of Natural Science
St. Johnsbury, Vermont 05819
Frederick H. Mold, Director
802-748-3413
Environmental Education Center

Agency of Environmental Conservation
Robert Williams, Secretary
State of Vermont
Montpelier, Vermont 05602

Conservation Society of Southern Vermont
John Stevens: Executive Director
Bondville, Vermont 05340

Nature Conservancy
Hubert Vogelmann, Chairman, Vermont Chapter
Botany Department
University of Vermont
Burlington, Vermont 05401

Vermont Development Department - a Vermont state agency devoted to disseminating information about the State of Vermont. Can supply a film called "A Thousand Hills" depicting the environmental problems of Vermont.

C-FORCE Action Center
"To advance creative learning in Vermont Education" (an ESEA Title III project)
P.O. Box 277
Lyndonville, Vermont 05851
(802) 626-9306 (in Essex-Caledonia District)
Committee Chairman: Andrew Fisher 695-2250

One of its projects is: HEED (Human Environment and Ecological Development). Some of the objectives: to develop in students an appreciation for a rural environment in which most will spend their lives by trips into it and working within it, to develop in 5 schools a K-12 program dealing with ecological problems, to establish a Local Advisory Council including students, parents and Lyndon State College faculty to direct and advise the project, to design and construct outdoor labs at each of the 5 target schools, to organize and distribute ecological resource kits to all schools in the district, to provide workshops, using Fairbank Museum personnel for in-district and other interested school districts, to utilize C-FORCE personnel for coordination and dissemination within the region, to plan for implementing, during the second project year, the K-12 program in remaining schools of the district and establishing an "environmental museum" for the district and other interested districts.

The area covered by this school district is highly rural; main industry is a large paper mill. It's a heavily forested region much favored by

hunters and campers thus the emphasis of the project on understanding and caring for wilderness type areas. The present 15 member committee meets monthly and has been concentrating this last year on outdoor lab areas for each school and on selection of appropriate materials such as field guides, soil-testing kits, field glasses and microscopes. The thrust this year will be on establishing an outdoor camping site for overnight or longer trips near Victory Bog, a large natural wilderness environment. Concerned citizens have waged a successful battle against the Army Corps of Engineers who want to dam it up for a developed recreational area. They expect to make the campsite available to children from other districts. Title I funds have been budgeted for sleeping bags, tents, etc. so that no child need feel left out because of lack of equipment. High school students have been involved in a series of mini-courses in hiking, camping, trail blazing, and rock climbing. These were organized sequentially so the simpler ones came first. Students were thus able to drop off when they felt the experiences were getting too strenuous.

POSSIBLE RESOURCE PEOPLE:

Happy Nelson
Vermont Environment Center
Ripton, Vermont 05766

Member of Ecology Center Communications Council

Bruce Chapman
Grafton School
Grafton, Vermont

User of GEE materials

Seward Weber
Vermont Natural Resources Council
97 State Street
Montpelier, Vermont 05602
802-229-9698

Edwin Schneider, Chairman
Environmental Studies Program
Steering Committee, Room 110
Agricultural Engineering Building
University of Vermont
Burlington, Vermont 05401

Mr. Wayne Timura
c/o Dr. William J. Jewell
Department of Civil Engineering
University of Vermont
Burlington, Vermont 05401

Analysis of Transportation and Environmental Resources of the Waterfront in Burlington, Vermont. Presented report at December, 1971 A.A.A.S. meeting.